

USSN: 10/810,065

Attorney Docket No.: 55752US019

Remarks

The copending application information in paragraph 0067 has been updated.

Applicant thanks the Examiner for extending to the undersigned attorney and attorney. Pamela L. Stewart the courtesy of an in-person interview on Friday, February 11, 2005, during which the arguments set out below were discussed.

Rejection of Claims 1-5, 8, 9, 10, 14, 15,**21, 24-30, 34, 38, 39, 45 and 48-51 under 35 USC §102(b)**

Claims 1-5, 8, 9, 10, 14, 15, 21, 24-30, 34, 38, 39, 45 and 48-51 were rejected under 35 USC §102(b) as being anticipated by Vial (GB 713,612), on grounds *inter alia* that:

"Vial shows conveying the substrate through a dry converting station in a close enclosure while supplying the enclosure with one or more streams of conditioned gas flowing at a rate sufficient to reduce materially the particle count in the close enclosure (fig. 1, page 2, lines 54-56, positive pressure in the chamber which will inherently reduce the particle count.) conveying the substrate through a series of interconnected close enclosures (6, 7, fig. 1), conveying the substrate in a close enclosure or series of close enclosures through at least a first dry converting station in the process (6, fig. 1). conveying the substrate in a close enclosure or series of close enclosures through at least a last dry converting station in the process (7, fig. 1), conveying the substrate in a close enclosure or series of close enclosures from at least a first dry converting station in the process through at least a last dry converting station in the process (6, 7, fig. 1) ... a dry converting station and substrate handling equipment for conveying the substrate through the dry converting station (fig. 1), the substrate being enveloped in the dry converting station by a close enclosure supplied with one or more streams of conditioned gas flowing at a rate sufficient to reduce materially the particle count in the close enclosure (fig. 1, page 2, lines 54-56, positive pressure in the chamber which will inherently reduce the particle count.), the substrate is conveyed through a series of interconnected close enclosures (fig. 1), the substrate is enveloped by a close enclosure or series of close enclosures through at least a first dry converting station in the apparatus (fig. 1), wherein a conditioned gas stream is supplied to at least the first in a series of

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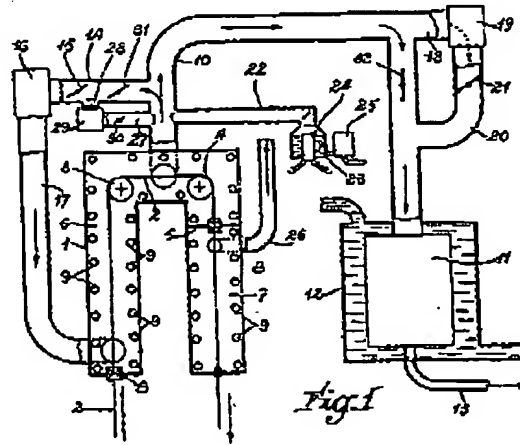
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interconnected close enclosures and the conditioned gas is carried along with the moving substrate to a downstream close enclosure or pushed to an upstream enclosure or process (fig. 1, gas will inherently be carried along.), the substrate is enveloped by a close enclosure or series of close enclosures through at least a last dry converting station in the apparatus (7, fig. 1), the substrate is enveloped by a close enclosure or series of close enclosures from at least a first dry converting station in the apparatus through at least a last dry converting station in the apparatus (6, 7, fig. 1), wherein a close enclosure has a pressure gradient of at least about -0.5 Pa or higher (page 2, lines 54-56), a close enclosure has a positive pressure gradient (page 2, lines 54-56), conveying the substrate through a dry converting station in a close enclosure while supplying the enclosure with one or more streams of conditioned gas flowing at a rate sufficient to cause a material change in a physical property of interest for the atmosphere in the close enclosure (fig. 1, page 1, lines 65-69), a dry converting station and substrate-handling equipment for conveying the substrate through the dry converting station, the substrate being enveloped in the dry converting station by a close enclosure supplied with one or more streams of conditioned gas flowing at a rate sufficient to cause a material change in a physical property of interest for the atmosphere in the close enclosure (fig. 1, page 1, lines 65-69)." (See Office Action at page 2, line 8 through page 5, line 5, emphasis added).

Applicant respectfully disagrees. Vial describes a drier 1 for drying a varnish on moving band 2 by removing an alcoholic solvent from the varnish as band 2 passes through chambers 6 and 7 (see e.g., page 2, lines 105-130 and Fig. 1, shown below):

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Vial at least dries a wet coating on band 2. Vial does not carry out "dry converting" and does not describe or suggest a "dry converting station". Applicant defines these terms in paragraphs 0028 and 0029 as follows:

[0028] When used with respect to a flexible moving substrate or an apparatus conveying such substrates, the phrase "dry converting" refers to an operation carried out without applying or drying a wet coating on the substrate, wherein the operation changes the substrate's cleanliness state, surface energy, shape, thickness, crystallinity, elasticity or transparency. Dry converting may include, for example, operations such as cleaning (e.g., plasma treating or the use of tacky rolls), electrically priming (e.g., corona-treating), slitting, cutting into pieces, splitting (e.g., stripping into sheets), laminating, stretching (e.g., orienting), folding (e.g., corrugating), thermoforming, masking, demasking, vapor coating, heating or cooling.

[0029] When used with respect to an apparatus for converting a moving substrate or a component or station in such an apparatus, the phrase "dry converting station" refers to a device that carries out dry converting.

Applicant accordingly requests withdrawal of the rejection of claims 1-5, 8, 9, 10, 14, 15, 21, 24-30, 34, 38, 39, 45 and 48-51 under 35 USC §102(b) as being anticipated by Vial.

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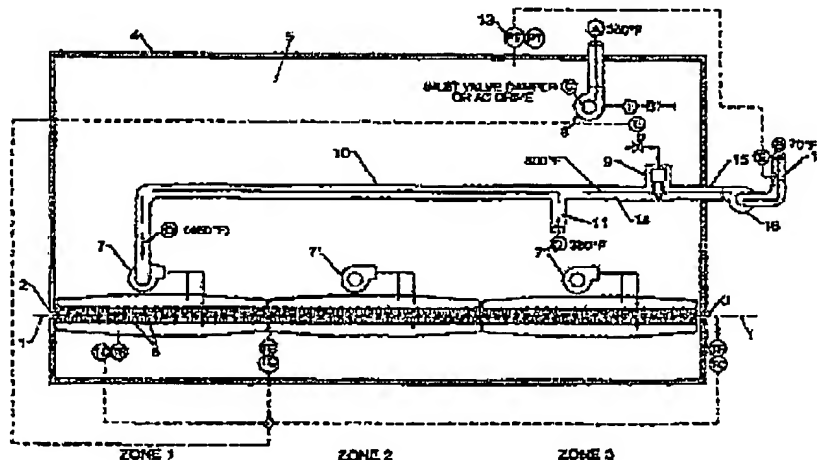
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Rejection of Claims 1, 11-13, 26, 35-37**under 35 USC §102(b)**

Claims 1, 11-13, 26 and 35-37 were rejected under 35 U.S.C. §102(b) as being anticipated by Seidl (US 5,528,839), on grounds *inter alia* that:

"Seidl shows conveying the substrate through a dry converting station in a close enclosure while supplying the enclosure with one or more streams of conditioned gas flowing at a rate sufficient to reduce materially the particle count in the close enclosure (fig. 1, col. 3, lines 40-44) ... a dry converting station and substrate-handling equipment for conveying the substrate through the dry converting station (fig. 1), the substrate being enveloped in the dry converting station by a close enclosure supplied with one or more streams of conditioned gas flowing at a rate sufficient to reduce materially the particle count in the close enclosure (fig. 1, col. 3, lines 40-44) (See the Office Action at page 5, lines 6-17, emphasis added).

Applicant respectfully disagrees. Seidl describes a drier 4 for removing solvents from a coating (e.g., an ink) on a moving web 1 as web 1 passes under air jet nozzles 6 and supply fans 7, 7' and 7'' (see e.g., col. 2, lines 51-55 and Fig. 1, shown below):



Seidl at least dries a wet coating on web 1. Seidl does not carry out "dry converting" and does not describe or suggest a "dry converting station" as defined by applicant. Applicant accordingly requests withdrawal of the rejection of claims 1, 11-13, 26 and 35-37 under 35 USC §102(b) as being anticipated by Seidl.

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Rejection of Claims 6 and 31 under 35 USC §103(a)

Claims 6 and 31 were rejected under 35 USC §103(a) as being unpatentable over Vial in view of Ogawa et al. (US 4,894,927), on grounds *inter alia* that:

"Vial discloses conveying the substrate through a dry converting station in a close enclosure while supplying the enclosure with one or more streams of conditioned gas flowing at a rate sufficient to reduce materially the particle count in the close enclosure (fig. 1, page 2, lines 54-56, positive pressure in the chamber which will inherently reduce the particle count.), a dry converting station and substrate-handling equipment for conveying the substrate through the dry converting station (fig. 1), the substrate being enveloped in the dry converting station by a close enclosure supplied with one or more streams of conditioned gas flowing at a rate sufficient to reduce materially the particle count in the close enclosure (fig. 1, page 2, lines 54-56, positive pressure in the chamber which will inherently reduce the particle count.), conveying the substrate in a close enclosure or series of close enclosures from at least a first dry converting station in the process . . . , the substrate is enveloped in a close enclosure or series of close enclosures from at least a first dry converting station in the apparatus . . . (fig. 1), . Vial discloses applicant's invention substantially as claimed with the exception of up to a takeup reel or up to or through a packaging station. Ogawa teaches up to a takeup reel or up to or through a packaging station (fig. 1) for the purpose of collecting the product. It would have been obvious to one of ordinary skill in the art to modify Vial by including up to a takeup reel or up to or through a packaging station as taught by Ogawa for the purpose of collecting the product so the product can be processed further or transported to another location and processed further and thus be in a suitable form for commerce."

(See the Office Action at page 6, line 1 through line 3 of page 7, emphasis added).

Applicant respectfully disagrees. As discussed above, Vail does not carry out "dry converting" and does not describe or suggest a "dry converting station". Ogawa et al do not do so either. Ogawa et al. describe a drying oven 5 that removes organic solvent from a wet coating composition 4 on web 1 (see e.g., col. 4, lines 7-13 and Fig. 1, shown below):

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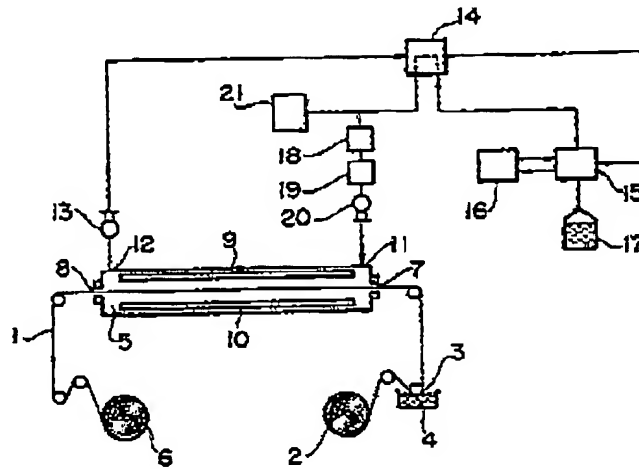


FIG. 1

Ogawa et al. apply and dry a wet coating. Even if Vail and Ogawa et al. were combined, the result would not provide an apparatus having a dry converting station as recited in claims 6 or 31.

Applicant accordingly requests withdrawal of the rejection of claims 6 and 31 under 35 USC §103(a) as being unpatentable over Vial in view of Ogawa et al.


Conclusion

None of the cited references shows or suggests dry converting or a dry converting station. Withdrawal of all rejections and allowance of applicant's claims is requested. The Examiner is encouraged to telephone the undersigned attorney at 612-331-7412 if there are any questions regarding this amendment.

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